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ABSTRACT

The need for a "systems" approach to school-based social competency training has been highlighted by a national commission and the U.S. Department of Education. The Pupil Involvement/Problem-Solving with People (PI/PSP) curriculum has adapted numerous, well-researched social compentency training models targeted for elementary classroom use. Designed as one portion of a four-level intervention (the Quality of School Life for Elementary Schools or QSL-E program), PI/PSP aims to promote a beneficial school climate through improved student and staff participation and more positive mutual expectancies. The program derives from industry's well-known quality circle programs, which provide training, structure, and legitimacy to employee participation in organizational problem-solving and decision-making. This paper describes PI/PSP, outlines the 5-unit curriculum of 21 lessons, and discusses implementation issues. The paper also briefly reviews research on outcomes. Observable benefits include increased student motivation and participation in class activities and increased ability to solve typical school-related problems. Teachers found PI/PSP to be an effective, systematic method of dealing with students' concerns and "buying back time" formerly spent disciplining children and reminding them of expected behavior. While PI/PSP had much to offer teachers, it was not a comfortable model for authoritarian teachers. However, the participatory model does not remove teacher authority and has great capacity for replication and dissemination. Included are 28 references. (MLH)

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Social Competency Training Goes to School: Pupil Involvement in the Classroom, through Problem-Solving with People [1]

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ABSTRACT: This paper describes Pupil Involvement/Problem-Solving with People (PI/PSP), a social competency training curriculum for elementary school children. The curriculum is outlined and issues of implementation are presented. Some research outcomes are briefly reviewed. The benefits observed for students include increased motivation and participation in class activities, and increased ability to solve typical school-related social problems. Teachers found PI/PSP to be an effective, systematic method to deal with students' concerns. They also found the program "bought back time" formerly spent disciplining children and enforcing formerly teacher-made decisions. The program's capacity for replication and dissemination is discussed.

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INTRODUCTION

The need for a "systems" approach to school-based social competency interventions has been highlighted by two contemporary publications — one from the National Commission for Excellence in Education (1983), and the other from the U.S. Department of Education (Kyle, 1985). These and similar publications have encouraged the nation's schools to seek strategies for reaching "excellence" and "effectiveness" in education. Improved school/classroom climate, increased participation of pupils and teaching staff in decision-making, cooperative teaching and learning strategies, and more positive teacher-pupil expectancies have been identified as necessary milestones for reaching the proposed excellence and effectiveness standards (Edmonds & Frederickson, 1979; Lezotte *et. al.*, 1980, Anderson, 1982; Thompson, 1984; Johnson & Johnson, 1987). The program described below is a comprehensive approach toward reaching those milestones.

BACKGROUND AND RATIONALE

The *Pupil Involvement/Problem-Solving with People (PI/PSP)* curriculum has adapted a variety of well-researched social competency training models targeted for school children within their classrooms. Among these models are the Interpersonal Cognitive Problem Solving (ICPS) program (Shure & Spivack, 1982), the Social Problem-Solving (SPS) curriculum (Weissberg *et. al.*, 1981), the Improving Social Awareness/Social Problem Solving (ISA/SPS) curriculum (Elias *et. al.*, 1982), and various "Causal Learning" curricula (Ojemann, 1961). Other PI concepts and activities have been adapted from (a) social research models (*e.g.* interviewing methods, survey techniques), (b) the adult learning model (*e.g.* brainstorming methods, task groups, interactive meeting format), (c) stress Management training models, and (d) task-focused "affective education" concepts and skill building strategies, developed in the 60's and early 70's, and adapted to meet the needs and concerns of today's more conservative climate.

PI-PSP was designed as one portion of a four-level intervention: The *Quality of School Life for Elementary Schools (QSL-E)* program. QSL-E is a social systems intervention, whose goal is to promote a beneficial school climate, through improved pupil and staff participation and more positive mutual expectancies. It is modeled on industry's well-known Quality of Work Life/Quality Circle programs, pioneered by Deming (Walton, 1986), which provide training, structure, and legitimacy for appropriate employee involvement and participation in organizational problem solving and decision-making. Children who participate in classroom PI/PSP activities emulate industry's shop workers on "the floor" in creating and maintaining changed teacher-student relationships, much as supervisor-worker relationships are altered by means of the factories' Quality Circle procedures. In a larger context, the participating school building and central administration may be implementing participatory decision-making strategies, such as the staff level QSL-E program.

QSL-E is a system of principles, practices, and methods which work together to (1) promote cooperative teaching and learning in classrooms and schools, (2) promote participatory problem solving at all levels in the school district, (3) increase children's competencies in dealing with others and in responsibly meeting their own needs, and (4) develop an orderly, effective school and classroom climate. Although each of the program's four levels may be used independently, districts are encouraged to implement the program in phases, setting a long-range goal for widespread, multi-level involvement.

The four levels of the QSL-E program are as follows:

- Pupil Involvement (PI) Circles — systematic activities, during which children learn and implement the cooperative skills needed for interpersonal problem solving, through use of the Problem-Solving with People (PSP) curriculum.

- Teacher or Staff Involvement (TI/SI) Committees — building level groups of teachers or full staff participating to identify problems or opportunities; find relevant facts; problem-solve; make recommendations; implement solutions; communicate; and evaluate results.

- Central Administrators' Participative Management Team (Participation Team) — a set of structures, roles and activities located at the level of central administration, which establishes guidelines and ensures the consistency of all the district's participative processes.

- Family and Community Involvement (FI/CI) Committee and its Task Forces) — a framework for enhancing cooperative problem-solving relationships among the school, the parents, and the community.

This paper will focus on Pupil Involvement, the classroom intervention. Since 1984, Pupil Involvement has been implemented in school districts in Michigan, Massachusetts, and Florida. In addition, the widely used Michigan Model for Comprehensive School Health Education includes an abbreviated version of PI/PSP, as the mental health component of its curriculum. Funded and directed by state government, this "Michigan Model" has been implemented in K-6 classrooms, reaching approximately 150,000 children (18% of the Michigan public school total) in its first three years.

PI/PSP, THE CURRICULUM

The PI/PSP curriculum functions as the classroom-based core of the QSL-E program. Pupil Involvement (PI) Circles serve as short classroom discussion meetings, during which teachers and children begin by identifying and solving typical problems which occur in school, and then work together to im-

prove the children's classroom and school-wide interactions. The curriculum consists of five scripted units, containing 21+ lessons (a number of supplemental lessons being optional). Each lesson is designed to be taught in a number of 15 minute segments, over as many days as seem necessary. The curriculum consists of the following:

Unit One: Getting Started: Children learn methods of communicating effectively in a classroom discussion, and become familiarized with the use of certain aids (*e.g.*: timer, turns-taking token). They practice PI Circle skills, and learn to distinguish between facts that can be seen or heard and those which require empathy and discussion.

Unit Two: Four Kinds of Control : The goal of this unit is to create a mutual understanding of issues surrounding "discipline" and other aspects of classroom Management. Classroom interaction becomes more predictable, because children and students reach agreement on concepts and guidelines for class behavior. Four ways in which people's behavior are influenced and structured are viewed: "Environmental control," "Authoritarian control," "Social control," and "Self control." These issues are illustrated by activities such as interviewing a "boss," demarking "personal space" on the floor, and "calm breathing."

Unit Three: Four Main Feelings: Children learn that feelings are facts to be explored when dealing with opportunities and problems; they learn to understand ways in which feelings contribute to situations. Four "main feelings" (Happy, Upset, Calm, and Surprise) are reviewed. The concepts of associated "other feelings" and "mixed feelings" are then taught.

Unit Four: PSP: Problem Solving with People : The goal of this unit is to teach children those basic concepts and competencies which enable them to identify and solve the kinds of interpersonal problems that occur in the course of their school day. The first lesson serves as a prototype "story problem," which introduces all the skills and concepts needed for problem-solving with the PSP process. Story problems can take a number of 15 minute PI sessions, before reaching resolution; thus, the children learn patience, by postponing closure when dealing with a complex problem or opportunity. After practicing with a number of typical school-based problems, the class uses the PSP process to solve real classroom problems.

Unit Five: Negotiation: As an extension of the PSP process, students learn the process of negotiation. They learn to develop and present proposals effectively. As with PSP, they practice negotiating with typical scenarios, so that they are better equipped to negotiate realistically and effectively with one another and with adults, in their daily lives.

IMPLEMENTATION PROCEDURES

Many useful lessons have been learned as a result of implementing PI/PSP in a wide variety of Elementary Schools. The experiences of the Michigan QSL/E team may offer useful information for school districts which may consider implementing PI/PSP or similar programs. Implementation of the PI/PSP curriculum was done thoughtfully, logically, and with a great deal of respect for the norms and constraints of the schools. It involved a number of steps: identifying a district and schools for participation; orienting the district's legitimizers; assuring resources — such as adequate funding; implementing a "pilot" demonstration; approaching key personnel for support; presenting the program's goals and methods to staff; identifying interested teachers;training teachers; distributing curricula and materials; consulting with program teachers, as needed, to ensure appropriate implementation of the curriculum; collecting and analyzing evaluation measures, during the pilot phase; and assisting a natural dispersion of the program, following the demonstration phase.

(A number of factors influenced the identification of schools which participated in Michigan's research component. For practical reasons, it was necessary to work with schools within about 10 miles of our Community Mental Health Center, since consultants made frequent trips back and forth. For research purposes, it was important to use program schools that demographically matched controls, and we were careful to choose schools which were not currently implementing some other social competency training/problem solving program or participating in the *Michigan Model for Comprehensive School Health Education.)*

Because the support of school administrators is critical to the success of any "systems" intervention in schools, we placed a great deal of emphasis on developing rapport and trust with all levels of school administrative staff. Orientation of central administrators and principals led to their understanding and support for the program's goals and methods. Principals also had to be willing to host consultants in their buildings — responding to their questions and their occasional requests (such as, use of office equipment, or relaying telephone messages). In addition, they became the program's primary communicators to other school administrators in the area. Equally important was the rapport and trust of the school secretaries. As facilitators of the day-to-day organization and communication within the school, secretaries provided valuable insight into the school's norms and procedures.

Once we had secured the support of a building administrator, a meeting was held to introduce the PI/PSP program to interested staff. A brief description of the history, goals, structure, and methods of the curriculum was provided. Volunteer teachers were signed up for in-depth training. At the subsequent training sessions (held for up to 12 teachers), the curriculum was reviewed carefully, with illustrative descriptions and anecdotes. A videotape was shown to provide a visual image of the teachers and students "in action," implementing the curriculum within their PI circles. Methods, such as participatory problem-solv-

ing and brainstorming, were modeled within the context of the training sessions (*e.g.*, teachers "delegated" responsibility for refreshments and "brainstormed" goals for the training sessions.) The duration and timing of training varied with each group, depending upon the availability of teachers and program consultants. A total time of at least 10 hours of teacher training was found to be advantageous.

Each of the PI/PSP-trained teachers received a grade-level curriculum, and a set of "trigger" flash cards. Depending on our resources and the resources of their district, they also bought, made, or were provided with a number of teaching aids: a packet of stimulus cartoons, a digital timer, several pads of lined newsprint, "feelings" posters, a "3 D's for Telling" poster, blank dry-erase "story-cards" for use on the PSP storyboard, a plastic ASK ME/TELL ME token, a roll of heavy twine for use with the "Personal Space" lesson, as well as sock puppets, for the K-2 curriculum.

Each consultant was assigned a group of teachers with whom to work throughout the year. Consultations took three forms: (1) classroom visitations, in which the consultant observed a PI-PSP session; (2) individual teacher consultation, in which the consultant and teacher shared information and problem-solved implementation difficulties; and (3) consultant-lead PI/PSP sessions, during which the consultant modeled procedures for the teachers and/or students, in order to help them through unfamiliar procedures.

In developing a positive consultative role, consultants got to know students and teachers on a friendly, respectful level. Students understood the role of the consultants and occasionally requested their presence for PI time. Because most consultants had a personal background which included teaching, we enjoyed a mutually respectful relationship with teachers. We made sure that we were aware of the schools' norms and procedures, when working in classrooms and schools. For example, consultants often joined the staff for lunch in the teacher's lounge, as an informal means of fostering a collegial relationship and developing an awareness of the issues they faced in their daily work.

Data collection was supervised by the program consultants, who had developed a positive working relationship with the school staff. One of the most challenging aspects of data collection was doing it in a manner that was the least disruptive to classroom procedures and the school curriculum. We arranged assessments around class schedules, postponed them if unexpected classroom activities intervened, sent clear and concise memos to staff regarding our data needs, and always put the school and classroom needs before our own.

ASSESSMENT AND EVALUATION OF PROCESS AND OUTCOME

The PI/PSP program has been extensively studied since 1985. Data are still being collected, analyzed and interpreted. Data collection for program and control classrooms has included a range of measures:

- Michigan Revised–Open Middle Interview (MR-OMI), (Aberbach, 1988), adapted from the Rochester OMI, (Polifka *et al*, 1981): A measure to indicate children's ability to independently apply specific problem solving skills.
- Group Social Competency–Open Interview (GSC-OI, adapted MR-OMI for classroom) (Hallarman, 1988): A measure using videotaped classroom PI sessions, to indicate class/teacher ability to apply specific problem solving skills as a group.
- Teacher-Child Rating Scale (T-CRS) (Hightower, 1986): A teacher-rated measure of student competencies and classroom behaviors.
- Room Behavior Checklist (RBC), adapted from T-CRS): A measure to assess changes in teachers' perception of global classroom behaviors which reflect aspects of classroom climate.
- Quality of School Life–Elementary Children (QSL-E), adapted from Epstein & McPartland's standardized secondary school QSL measure(1976): A measure to record children's perceptions of classroom behaviors and norms.
- School Hassle Index (SHI), adapted from the School Anxiety Questionnaire(SAQ) (Schelkun & Dunn, 1967) : A measure to record children's reactions to stressful classroom situations.
- Demographic data for individual pupils (age, sex, race, perceived SES, academic scores).

To date, the most thorough analysis has been completed on the GSC-OI. The pre-post videotaped assessments of group social competency and problem-solving ability show promising post-intervention results in several areas :

(1) Program groups solved a specimen problem in a more systematic and sequential manner than the controls.

(2) Program classes were significantly better able to identify a specific and relevant focus for the problem than controls.

(3) Program groups provided more varied, effective solutions to the problem than controls.

(4) Program classes were significantly better able to reach consensus on an "action plan," or solution of choice, than control classes.

Details of these results are explicated elsewhere (Schelkun *et. al.*, 1987). Generally, it was demonstrated that groups which participated in the PI/PSP program held more focused discussions in solving typical school-related social problems than did controls. They were more likely to follow logical steps of fact-finding, problem-identification, goal-setting, generation of alternate solutions, consequential thinking, and consensual decision-making. They were more able to generate effective, non-redundant solutions to a main problem. They wasted less time repeating one another's ideas and getting "off track" by discussing irrelevant ideas. They were consequently better able to reach consensus on an appropriate action plan. Learning the PSP process, in effect, freed the class to think creatively, yet productively, when faced with typical problem situations.

DISCUSSION

Our research, and that of others, has empirically validated social competency/problem-solving training for elementary school children. However, equally persuasive in our program was the consultants' observational data regarding its benefits for students and teachers. Students reported PI to be a relevant, interesting and fun part of their school curriculum. They reported anecdotes which indicate that learning the PSP process helped them in their daily lives. Many times, when a consultant was observing a class, he or she would hear a child request a PI session. This was particularly noticeable during transition times: for example, students returning from recess on the playground would request a PI session to deal with the problem of "hogging the ball." PI sessions gave students a legitimized and effective forum to work on problems and opportunities that were of immediate importance to them.

Another benefit for students was that the PI sessions provided a method for dealing with "loaded" classroom issues, "distancing" issues by means of a de-personalized story problem. The PSP "storyboard" consisted of a visual outline of the problem-solving sequence demonstrated by "stick-figure" cartoons; the class served as "consultants" to a child named "Terry," the protagonist in the story. In some cases "Terry" represented a typical child their age in a fictitious situation. Other times "Terry" represented a nonspecific child in their class with a very real problem. Problems were "distanced" by this process — thereby avoiding the procedural and political pitfalls of children's disclosing private personal or family information. Children were consequently never scapegoated or placed on the "hotseat" in the PI discussions, but were allowed the opportunity to solve problems calmly and effectively as a group.

PI/PSP also seemed to be particularly helpful to students who did not excel in other, more traditional portions of the school curriculum. Students who were frustrated with reading, or bored with arithmetic, often found that they could excel in PI. Sometimes they were observed to be among the most vocal and creative thinkers in the group. PI has an advantage over other curricula in that it uses multiple modes (auditory, graphic, practice, discussion) in teaching the problem solving skills; students can use the modes most suited to their own individual learning styles.

A major concern of teachers was <u>time</u>. Because teachers are under a great deal of pressure to teach a number of basic and supplementary subjects, their teaching curriculum is very full. In fact, of the teachers who opted not to participate in Pupil Involvement, time constraints were the primary reason given. Fortunately, those who did participate reported that, rather than encroach further on their already tight teaching agendas, PI actually "bought them time." It did so in two ways. First, teachers using PI reported spending less time disciplining children and reminding them of expected behavior. Since an objective of PI is to encourage students to take responsibility for their classroom norms, peer reminders usually intervened to settle the situation when those norms were broken. Frequently, the teacher didn't have to get involved; or, if necessary, an issue could be deferred for PI time instead of interrupting academic work. Second, teachers who

became comfortable in using the curriculum, found that there were many ways to incorporate PI procedures into other parts of the class day. For example, after solving a storyboard problem, one teacher had students write the story from beginning to end, as a writing assignment. A first grade used the "Feelings" unit to satisfy a requirement of her Social Studies curriculum. A fifth grade teacher simulated a summit level PI session with the President and the leader of an adversarial nation as a Social Studies lesson. Others used the "Who's the Boss" lesson as an opportunity to teach interviewing skills.

Another benefit was that the process introduced the use of new teaching aids. Consultants were pleased to find that participating classrooms used the PI teaching aids throughout their day. Dry erase boards and newsprint provided ways to preserve important information for further attention on another day. The timer was used for "time-out," quiet work time, small group activities, and as a reminder of special activities. Teachers appreciated the help it gave them with all their time-keeping duties. Also, the "ASK ME? TELL ME" discussion token allowed for more effective class discussions in all areas of the curriculum; passed from child to child, it removed from teachers the stressful burden of calling on children constantly for responses.

Consultants found that, although PI/PSP had much to offer teachers, it was not a comfortable model for all teachers. A minority of teachers, who seemed accustomed to an authoritarian teaching style, had difficulty adjusting to the participatory methods of PI/PSP. For them, the most difficult unit of the curriculum was Unit Two: Four Kinds of Control. These teachers were unsure about the concepts introduced around social control (norms). They were unaccustomed to the notion of having students share responsibility for classroom functioning. Consultants found it important to spend more time guiding these teachers in the art of "holding back," resisting the urge to solve classroom problems autocratically. With practice, however, these teachers reported that they enjoyed their students' increased sense of responsibility, empathy, and motivation. They also discovered that the participatory model does not remove their authority as a teacher. In fact, their authority was clearer, because students understood the reasons why it was necessary.

Thus, PI/PSP was found to be a relevant and effective program for elementary classrooms. It offered students and teachers a structured curriculum aimed at improving skills of social competency. It enabled motivated teachers to improve their classroom climate through participatory problem-solving. Although teachers also had to invest time in learning the lessons and methods used, the payoff was clear: students learned important skills that could be continually developed and nurtured.

The "clean draft" PI/PSP curriculum will undergo final revision during the summer of 1988, and training videotapes will be made available, so that teachers can implement it with minimal training and consultation. The school's own support personal — for example, psychologists, social workers, and counselors — will be helpful to teachers who use the curriculum and who will be more willing to implement the highlighted processes, once they are assured of professional backup when unusual problems are manifested.

REFERENCES

Aberbach, A., Hallarman, P., & Schelkun, R. F. (1988). *The Michigan Revised–Open Middle Interview (MR-OMI) Manual.* Ann Arbor, MI: QSL Program of the Washtenaw County Community Mental Health Center.

Anderson, C.S. (1982). The search for school climate: A review of the research. *Review of educational research, 52*, 368-420.

Elias, M. J., Gara, M., Ubriaco, M. & Schuyler, T. (1982). *The improving social awareness social problem-solving project: A case study of school-based action research.* (Action Research Workshop Report No. 4). New York: Wm. T. Grant Foundation.

Edmonds, R.R. & Fredericksen, J. R. (1979). *Search for effective schools: The identification and analysis of city schools that are instructionally effective for poor children.* Cambridge, MA: Center for Urban Studies.

Elias, M. J., Gara, M., Ubriaco, M., Rothbaum, P. A., Clabby, J. F., & Schuyler, T. (1986). Impact of a preventive social problem solving intervention on children's coping with middle-school stressors. *American Journal of Community Psychology, 14*, 259-275.

Epstein, J.L. & McPartland, J.M. *The concept and measurement of the quality of school life.* American Educational Rsearch Journal, 1976, 13, 15-30.

Gesten, E. L., Flores de Apodaca, R., Rains, M., Weissberg, R. P., & Cohen, E. L. (1979). Promoting peer related social competence in school. In M.W. Kent & J. E. Rolf (Eds.), *The primary prevention of psychopathology. Promoting social competence and coping in children.* Volume 3. Hanover, NH.: University Press of New England.

Hallarman, P., Aberbach, A., & Schelkun, R. F. (1988). *The Group Social Competency–Open Interview (GSC-OI) Manual.* Ann Arbor,MI: QSL Program of the Washtenaw County Community Mental Health Center.

Hightower, A. D., Work, W. C., Cowen, E. L., Lotyczewski, B. S., Spinell, A. P., Guare, J. C., & Rohrbeck, C.A. (1986). The Teacher-Child Rating Scale: A brief objective measure of elementary children's school problem behaviors and competencies. *School Psychology Review, 15*, 393-409.

Johnson, D.W. & Johnson, R.T. (1987). *Learning together and alone: Cooperation, competition, and individualization.* Englewood Cliffs, NJ: Prentice-Hall.

Kyle, R. (Ed.), (1985). *Reaching for excellence: An effective schools sourcebook.* Washington, D. C.: National Institute of Education, U. S. Department of Education.

Lezotte, L. W., *et. al.*(1980). *School learning climates and student achievement.* Tallahassee, FL: SSTA Center for Teacher Educational Projects, Florida State University.

National Commission on Excellence in Education (1983). *A nation at risk: The imperative for educational reform.* Washington, DC: U. S. Government Printing Office.

Ojemann, R. (1961). Investigation in the effects of teaching understanding and apprecation of behavior dynamics. In G. Caplan (Ed) *Prevention of mental disorders in children.* New York: Basic Books.

Polifka, J. A., Weissberg, R. P., Gesten, E. L., Flores de Apodaca, R., & Piccoli, L. (1981). *The open middle interview (OMI) Manual.* Rochester, NY: Center for Community Study.

Schelkun, R. F. (1987). *PI/PSP: Enhancing Classroom Climate Through Pupil Involvement and Problem Solving with People (in press).* Ann Arbor, MI: Human Networks.

Schelkun, R. F. (1985). PI/PSP: Problem solving with people. In *Michigan model for comprehensive school health education.* (Vols. K-6). Lansing, MI: Michigan Department of Education.

Schelkun, R. F., Tableman, B., Genero, N., & Cooper, S. (1987) *QSL: A social system's intervention to improve elementary school/classroom climate.* Presented at the 95th annual convention of the American Psychological Association, New York, August, 1987.

Schelkun, R. F., Tableman, B., Cooper, S., & Groves, D. (1987). Quality of school life for elementary schools (QSL-E): A system-wide preventive intervention for effective schools. *Community Psychologist, 20,* 8-9.

Schelkun, R. F. & Dunn, J. A. (1967). *School anxiety and the facilitation of performance.* Paper presented at the annual conference of the Midwest Psychological Association, Chicago, IL.

Shure, M. & Spivack, G. (1982). Interpersonal cognitive problem solving (ICPS): A training program for the intermediate elementary grades. Philadelphia: Hahnemann University, Department of Mental Health Sciences.

Shure, M. B. & Spivack, G. (1978). *Problem-solving techniques in child rearing.* San Francisco, Jossey-Bass.

Spivack, G. & Shure, M. B. (1984). *ICPS and beyond: Centripetal and centrifugal forces.* A joint response to the Division of Community Psychology Distinguished Contribution Award, presented at the 92nd Annual Convention of the American Psychological Association.

Spivack, G., Platt, J. J., & Shure, M. B. (1976). *The problem-solving approach to adjustment.* San Francisco, Jossey-Bass.

Thompson, L. 1984. *Academic development in the effective school: A review of the literature.* SSTB Research Center Report #106, Regina, Saskatchewan.

Walton, M. (1986). *The Deming Management method.* New York: Dodd Mead.

Weissberg, R. P., Gesten, E. L., Carnrike, C. L., Toro, P. A., Rapkin, B. D., Davidson, E., & Cowan, E. L. (1981). Social problem-solving skills training: A competence-building intervention with second-to-fourth grade children. *American Journal of Community Psychology, 9,* 411-423.

Weissberg, R. P., Gesten, E., Liebenstein, N. L., Doherty-Schmid, & Hutton, H. (1980). *The Rochester social problem solving (SPS) program.* Rochester, NY: Primary Mental Health Project.